

NEWSLINE

Published weekly for employees of Lawrence Livermore National Laboratory

Friday, October 25, 2002

Vol. 26, No. 43



FROM THE DIRECTOR'S OFFICE

Hal Graboske

Lab to review science and technology investment strategy

Our recent 50th anniversary events presented a great opportunity to reflect on what our Laboratory is all about, and why we have been able to carry out our national security mission so successfully for the past half-century. Lawrence Livermore is first and foremost a scientific laboratory, whose workforce shares a passion for science and scientific excellence in all our programmatic work and basic research.

Many felt the high point of the 50th anniversary week was Tuesday, Sept. 17 – “Science Day.” It was a tremendous celebration of the many fields in which the Laboratory played a truly pioneering role, with the sustained commitment over decades that is the hallmark of national laboratory science, and of the distinguished scientists who made it happen. The auditorium was packed all day, as was the “Science Expo” tent, confirming that we’ve maintained the vision of Ernest Lawrence and Edward Teller, who founded the Laboratory in 1952. It’s a message that was recognized by the representatives of DOE/NNSA, the Office

See **DIRECTOR'S OFFICE**, page 7

Health care representatives to present plan overviews

In preparation for Open Enrollment, which begins Nov. 1, the Benefits Office has invited representatives from the medical plans to provide overviews of their coverage for employees.

Representatives from Health Net will give a presentation today from noon-1 p.m. in the Bldg. 123 auditorium. Representatives from Blue Cross will give two presentations on Tuesday, Oct. 29, the first from noon-1 p.m., then again from 1:30-2:30 p.m. in the Bldg. 123 auditorium.

The Benefits Office will discuss all Open Enrollment changes for 2003 on Wednesday, Oct. 30, 11:30 a.m. to 1 p.m. in the Bldg. 123 auditorium.

On Nov. 7, a representative from Kaiser will make a presentation and answer questions, from noon-1 p.m. in the Bldg. 123 auditorium. All employees are invited to all presentations.

UC began mailing Open Enrollment packets this week to all employees. Watch for yours in the mail. Packets will include a personalized statement and booklet, the plan rates and an explanation of the new rate structure and summaries of each plan.

For more information, contact the Benefits Office at 2-9955.

Homeland Security taps Lab experts

By Stephen Wampler

NEWSLINE STAFF WRITER

Final decisions are yet to be made by Congress and the President about the establishment of the new Department of Homeland Security. But in the meantime, employees from the Laboratory and those from other national labs are hard at work in the planning for the new federal department.

Two Livermore employees, Mike Carter and Greg Suski, have been in the nation’s capital for the past two months providing assistance to the Homeland Security Department’s transition planning office.

Working within the Executive Office of the President, Carter and Suski are technical advisers for the Homeland Security Department’s science and technology section.

“The job of the transition planning team is to prepare for how the new department will operate once the President signs the legislation,” Carter said. “We are working together to help lay the foundation for the department’s science and technology.”

Twelve members of the transition planning



Laboratory employees are assisting in the transition planning for the new Department of Homeland Security. Earlier this summer at a press conference, LLNL physicist John Becker showed off the Cyro3, a new instrument for radiation detection developed by Livermore and Lawrence Berkeley researchers.

office’s 50 people focus on science and technology. Besides Carter and Suski, the team includes

See **HOMELAND**, page 8

New joint Biophotonics Center unveiled

By Anne M. Stark

NEWSLINE STAFF WRITER

Lab officials in collaboration with the University of California, Davis and eight other academic institutions on Thursday announced a new \$52 million Center for Biophotonics Science and Technology to study the use of light and radiant energy in biology and medicine.

Projects include portable detectors for anthrax as well as other biological agents, and

new tools to diagnose and treat cancer and stroke.

Funded with \$52 million over the next 10 years, including a \$40 million grant from the National Science Foundation, the Center for Biophotonics Science and Technology will bring together scientists, industry and educators to research and develop applications for biophotonics — the science of using light to understand the inner workings of cells and tis-

See **COLLABORATION**, page 7

ASCI simulations illuminate high explosives

Laboratory researchers have developed an advanced supercomputer model for explaining high explosive detonation.

Extreme conditions occur during high explosive detonation: temperatures to 6000 F, pressures to 500,000 times the Earth’s atmospheric pressure and billionth-of-a-second time-scales. So little is understood about the physics and chemistry underlying high explosives. But advanced supercomputer models can help

explain explosive detonation phenomena. Knowing this information is essential to the nation’s science-based Stockpile Stewardship Program to simulate the aging and operations of nuclear weapons using high-performance computers. This computing milestone was achieved Sept. 30 using hydrodynamic computer codes, which simulate the fluid-like flow

See **ASCI**, page 8



HOME on the
run

— Page 4,5



— Insert



LAB COMMUNITY NEWS

Weekly Calendar

Friday
25

The Lab's **Brighter Holidays** program is in full swing. This year, groups of employees are sponsoring families with holiday gifts and food donations. If you or your group is interested in sponsoring a family, call Betty Klino 443-0642. If you have questions regarding the program, contact Joanna Stadler, 2-7985, or Annette Springer (3-3546). More detailed information will be coming in the near future.

...

Get hip, have fun and get some exercise by signing up for any of the **specialty classes** offered by LLESA, including power yoga, hip hop/funk, east coast swing, salsa, gentle yoga and core training. Classes begin next week and are held in Bldg. 415, room 101 and 102 and Bldg. 317, Rainier room. Class sizes are limited, so sign up now. Call 2-9402 or 2-9403 for more information. Cost per class is \$30 for the six-week session.

Sunday
27

The 5th annual **American Cancer Society's** "Making Strides for Breast Cancer" walk is this weekend. Volunteers are needed to raise money or walk on Sunday, Oct. 27, through Golden Gate Park. Registration forms are located around the Lab or call Vicki Cuniffe, 2-9431, for information.

Tuesday
29

There are 650 doses of **flu vaccine** remaining for the general Lab population. The next flu shot clinic is today at 10 a.m. at the South Cafeteria. If there are doses remaining after Tuesday, they will be available Wednesday at 10 a.m. at the Central Cafeteria.

Thursday
31

It's time to **Run for HOME**. The race will start officially at noon on West Perimeter Drive just outside parking lot Z-3, beside Bldg. 132. Participants can warm up 15 minutes before the race with a brief aerobic workout accompanied with music. The swim begins at 11 a.m. at the Lab pool. See full story, page 5.

...

The **LLESA Chinese American Networking Group** is selling egg rolls at the Run for HOME. Egg rolls are \$1 each (regular or vegetarian). Pre-orders can be made before close of business Wednesday through Eric Chow, 2-0552 or chow6@llnl.gov. All pre-orders may be picked up in the Z-1 parking area outside Bldg. 111 from 11:30 a.m. to 12:30 p.m. All pre-orders remaining after 12:30 p.m. will be sold.



LLNL and the American Red Cross are having a special O-type blood drive on Monday, Nov. 4, 9 a.m.-2:45 p.m. Employees may schedule an appointment at <http://www.beadonor.com> (company code: LLNL) or by calling LLESA, 2-9402.

Grant benefits ETEC's rural education efforts

By Elizabeth Campos Rajs

NEWSLINE STAFF WRITER

Director Emeritus Edward Teller was on hand at a recent ceremony to accept a \$50,000 grant from Washington Mutual on behalf of the Edward Teller Education Center (ETEC).

"I am very deeply touched," Teller said in accepting the check. He spoke for a few minutes about the great impact that science has made on the world and the promise it holds for the future, particularly in the area of weather prediction.

"There is widespread fear of science in the world. But what it stands for is the opposite of fear," Teller noted.

The grant presented last week will be used to enhance professional development for science teachers in rural school districts, said ETEC Director Stan Hitomi. Plans are underway, in partnership with Merced

College, to pay for teachers in outlying schools to come to the Lab for a one-week science research academy and to participate in next year's two-day science and technology symposium.

"ETEC has the mission of improving science and technology education K-14 throughout the San Joaquin and Tri Valley areas," Hitomi said. "Next month we are having a focus group to bring rural educators together to help us develop a more concrete plan."

More than 30 people gathered at the UC Davis Department of Applied Science on Oct. 15 for the presentation of the check, including state Sen. Dick Monteith (R-Modesto), Merced College president Ben Duran and representatives from Washington Mutual.

Monteith said he became involved in education as a legislator when he learned that a couple of students in his district were unable to gain admission to a UC campus, despite scoring well on their SATs and earning high grade point averages. The problem, it seemed, was that their high school transcripts lacked Advanced Placement classes, but the AP courses were not available at their school.

"That got my dander up and I got myself on the

education committee," Monteith said. "I was the only one on that committee representing central California."

As a result, Monteith said he and Assemblyman Dennis Cardoza (D-Merced) helped start a Rural Education Summit, which brings together educators, legislators and community members to address the problems unique to rural schools.

"I am not an educator, I am a facilitator," Monteith said. "When you all came to us, my eyes

just exploded. You are to be commended for your gifts, the knowledge you have and your willingness to share. In rural education, we have many challenges, but every child is important. Every child is given a gift and you are helping to provide an opportunity to use that gift. There is only one thing I can say and that is thank you."

ETEC, established in 2001, is a

collaboration

between the Laboratory, UC Davis and UC Merced to foster excellence in teacher training in science and math. The center provides opportunities for professional development for teachers working with participating school districts within the greater Livermore Tri-Valley area and the San Joaquin and Sacramento valleys.

"Our focus is on what institutions like Livermore Lab and research universities, like UC Davis and UC Merced, can bring to the compelling national issue of the education of our youth," said Laura Gilliom, director of the University Relations Program. "We're addressing that by providing opportunities for professional development in science and technology for teachers. We want kids to learn very early on that math and science are a joy and an opportunity."

ETEC is temporarily housed at the UC Davis Department of Applied Science. But construction is beginning on a new, 3,400-square-foot building, which will include a wet laboratory classroom and a computer technology and lecture classroom. It will be located adjacent to DAS and is expected to be completed by January 2003.



DON JOHNSTON/NEWSLINE

Director Emeritus Edward Teller, Sen. Dick Monteith, far right, and Merced College president Ben Duran, second from right, were on hand for the check presentation.

IN MEMORIAM

Ray H. Cornell

In lieu of a memorial service for Lab retiree Ray H. Cornell, there will be a memorial exhibit featuring his art work, beginning at 1 p.m. Sunday, Oct. 27, at Los Positas College in the Student Center Building.

Cornell, who retired in 1993, died Sept. 15. He was 69.

Cornell, who worked at the Lab as a mechanical engineer from 1961 to 1993, developed an interest in painting after retiring.

Art courses through Livermore Adult Education and at Las Positas College offered him the opportunity to explore and develop his talent.

Cornell lived in Livermore for 34 years. He was a Boy Scout leader for several years and was a member of an amateur radio club.

Cornell is survived by his wife of 40 years, Janet Cornell, and sons, Steven and Ronald, both of Livermore.

Memorial donations may be made to the Livermore Art Association Education fund, P.O. Box 216, Livermore, 94551.

Newsline

Newsline is published weekly by the Internal Communications Department, Public Affairs Office, Lawrence Livermore National Laboratory (LLNL), for Laboratory employees and retirees.

Contacts:

Media & Communications manager: Lynda Seaver, 3-3103

Managing editor: Don Johnston, 3-4902

Contributing writers: Elizabeth Campos Rajs, 4-5806; David Schwoegler, 2-6900; Anne Stark, 2-9799; Steve Wampler, 3-3107; Gordon Yano, 3-3117. For an extended list of Lab beats and contacts, see <http://www.llnl.gov/llnl/06news/NewsMedia/contact.html>

Graphic designers: Denise Kellom; Julie Korhummel, 2-9709

Distribution: Mail Services at LLNL

Public Affairs Office: L-797 (Trailer 6527), LLNL, P.O. Box 808, Livermore, CA 94551-0808
Telephone: (925) 422-4599; Fax: (925) 422-9291
e-mail: newsline@llnl.gov or newsline@llnl.gov
Web site: <http://www.llnl.gov/PAO/>

1952 – 2002 MAKING HISTORY, MAKING A DIFFERENCE



This is an ongoing feature highlighting the Lab’s 50-year history. This week we take a look at the years 1993 and 1994.

Hot technology removes contamination

If the Laboratory had used conventional methods in 1993 to clean major leaks from its underground gasoline tanks, the project would still be under way. Estimates had pegged the time at 30 to 60 years to remove thousands of gallons of gasoline that had leaked into the soil beneath the shipping and receiving area north of East Avenue.

But instead of decades or even years, the 7,600 gallons of gasoline were mopped up in about four months using remediation technologies developed by Laboratory scientists Roger Aines, Robin Newmark and John Ziagos in collaboration with a UC Berkeley researcher. The technique, called dynamic underground stripping, involves injecting steam to heat the ground. Contaminants are vaporized and driven to extraction wells, where they are easily removed from soil and water.

Department of Energy officials have estimated that the Livermore-developed environmental technology has the potential to remediate up to one-quarter of the nation’s 1,300 Superfund sites. Already, the technology has achieved remarkable success cleaning a Superfund site in Visalia, Calif., between 1997 and 1999, removing about 1.2 million pounds of contaminants.



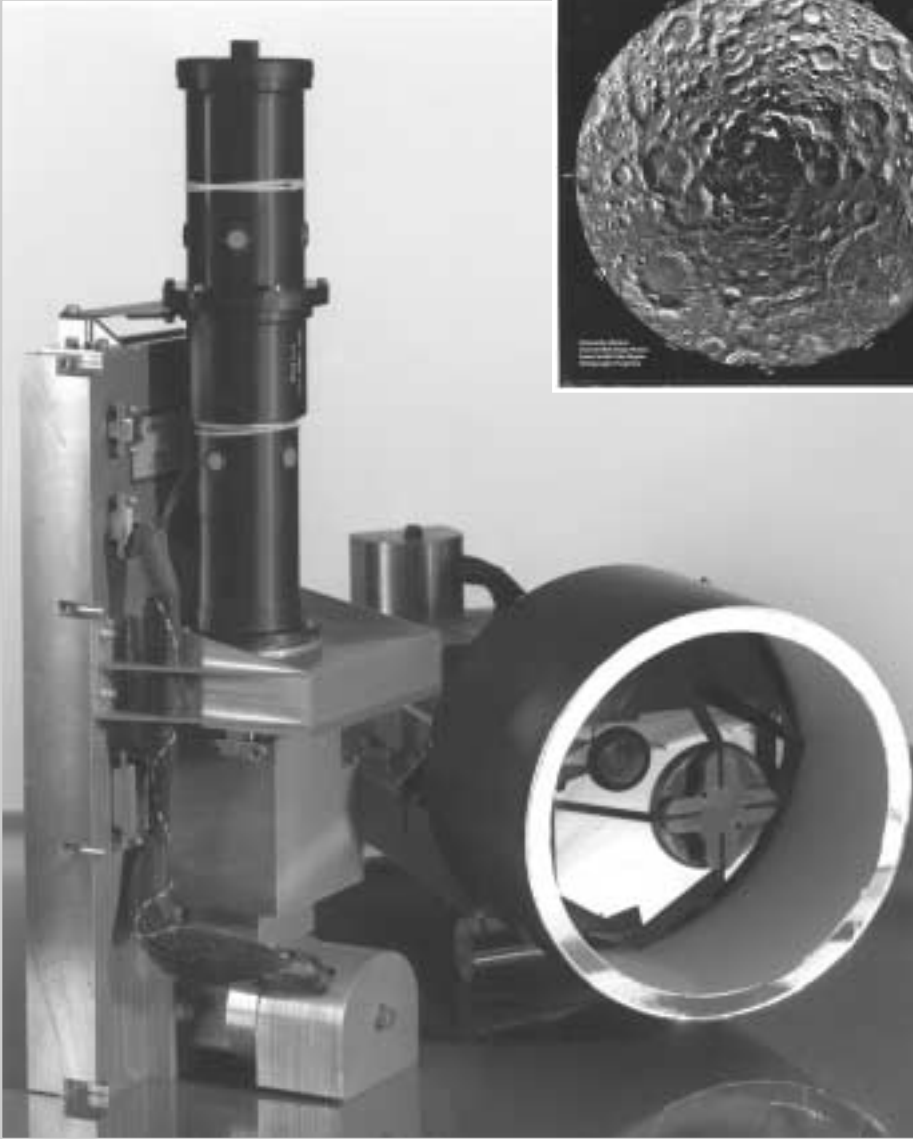
Dynamic underground stripping cleans up underground hydrocarbon spills.

Advanced sensors map the moon

The Clementine Deep Space Experiment, sponsored by the Ballistic Missile Defense Organization, was launched Jan. 25, 1994 — 22 months after the effort began. At a mission cost of less than \$100 million, it was the first U.S. spacecraft to visit the moon in more than two decades. The Clementine mission collected more than 1.7 million images during its two months in lunar polar orbit. The data has enabled global mapping of lunar-crust rock types and the first detailed investigation of the geology of the lunar polar regions and the lunar far side.

The Clementine spacecraft incorporated 23 advanced subsystem technologies and had a dry mass of only 500 pounds. The spacecraft’s payload consisted of an advanced sensor suite weighing less than 16 pounds that was designed, fabricated, integrated, and calibrated by Laboratory scientists and engineers with the support of industrial contractors. Sensor-system technologies were derived from Livermore’s space-based interceptor development program, Brilliant Pebbles.

A wide variety of projects to develop state-of-the-art sensor technologies at the Laboratory are building on the success of the Clementine program.



Using six on-board cameras designed and built at the Laboratory, the Clementine satellite mapped the entire surface of the Moon in 1994 at resolutions never before attained. Image inset: A mosaic of 1,500 images taken by Clementine reveals for the first time a 300-kilometer-wide depression near the Moon’s lunar south pole.

An open letter to Laboratory employees about the 2002 HOME Campaign

From Dona Crawford,
Computation Directorate AD



Although I cannot visit each of you individually, consider this your personal invitation to participate in the Laboratory's 28th annual Helping Others More Effectively (HOME) Campaign. I wish that I could speak with you one-on-one to

tell you how important the HOME Campaign is to local service and community agencies.

The Laboratory is internationally recognized for work in national security and nonproliferation, the National Ignition Facility, research in supercomputing, energy, environmental protection and restoration, advances in biosciences and health, and other significant scientific contributions.

I hope that we can become equally acknowledged for our generosity and support for local service agencies. The beginnings of such a legacy can be seen in the last four HOME campaigns. Laboratory contributions steadily increased by over \$100,000 each year, for a total of more than \$4.5 million donated.

For the fifth consecutive year, the employees of the HOME committee have targeted a goal of raising more than \$1 million. In fact, this year's mark of \$1.4 million sets the most ambitious standard yet for Laboratory employees and supplemental labor workers.

Created 28 years ago, the original HOME

Campaign was conceived to bolster the Bay Area's annual United Way drive and to better serve the communities where Lab employees lived. Prior to that first campaign, the Lab staged an annual United Way charity drive, much like that at any corporation or business firm. Lab employees, however, were not convinced that their contribution dollars served local communities.

So, Jim Kane and Dan Steinberg created the HOME Campaign to expand on the United Way effort, and to directly fund agencies important to employees and their nearby neighborhoods.

Today, that same spirit of community participation lives on in the 2002 HOME

Campaign. Committee members contacted local service agencies and every agency that participated in the 2001 campaign to invite them to participate. Individual and umbrella agencies participating this year are briefly described in the HOME Campaign booklet currently being distributed.

Each year, the 8,000-plus employees and supplemental labor workers who comprise the

Laboratory generously give back to their communities. I believe we will continue in that tradition this year as well.

Johnson Controls, the Laboratory's supplemental labor contract firm, will continue to match every dollar contributed by its workforce members, as well as RSI and AID staff. I applaud that contribution and thank Johnson Controls for supporting the HOME Campaign so generously.

Your departmental HOME representative or Johnson Control supervisor will deliver a HOME Campaign packet to you in the next few days. Many of the agencies in the packet operate under minimal budgets, and our HOME Campaign has become a significant source of their

operating income.

Please consider adding your contribution to mine — either one time or by payroll deduction — to assure the continued vitality of these community services. Together, all of our contributions truly make a difference. The campaign officially opens next Thursday, Oct. 31, and the deadline for contributions is Dec. 6. Thank you for helping in whatever way you can.



STEVEN KIAR/COMPUTATION

Computation AD Dona Crawford hands Ted Michels the first packet for this year's HOME Campaign.

Technical Meeting Calendar

Friday
25

MATERIALS SCIENCE & TECHNOLOGY

"Selective Ligation Methods for the Ordered Attachment of Proteins to Surfaces," by Julio

A. Camarero, Biosecurity Support Laboratory. 3:30 p.m., Bldg. 235, Gold Room. Coffee and cookies will be served at 3:20 p.m. Contact: Rebecca Browning, 2-5500.

PHYSICS & ADVANCED TECHNOLOGIES

"The Cosmic Microwave Background & Inflation, Then & Now," by J. Richard Bond, University of Toronto. Noon, Bldg. 319, Room 205. Michael Gregg, 3-8946, or Sandra Maldonado, 3-0621.

Monday
28

ELECTRONICS ENGINEERING TECHNOLOGIES

"Estimating a Low-Intensity Input 222Rn Signal to a Continuous Radon Monitor as

the Center Intensity of an Inhomogeneous Poison Cluster Process," by Ann Kalinowski. 10—11 a.m., Bldg. 141 room 1104 (Bay 1) (uncleared area). Contact: Cathy Kenton, 4-3875.

ENVIRONMENTAL PROTECTION

"Chemical Warfare Biological Live Agent Outdoor Testing in the Czech Republic from Archaeological Time to the Present," by Miroslav Skoumal, Military Technical Institute of Protection, Czech Republic. 9 a.m., Trailer 5475, room 1003 (uncleared area). Contact: Gloria Baker, 2-9342.

Wednesday
30

MATERIALS RESEARCH INSTITUTE SEMINAR

"The Structure and Distribution of Voids in Spall Fracture from 3D X-ray Tomography, 2D

Microscopy and Direct Numerical Simulation", by Jim Belak, H-Division / PAT. 3:30 p.m., Bldg. 219 room 163 (uncleared area). Contacts: Mike McElfresh, 2-8686; Joanna Allen, 2-0620.

Friday
1

PHYSICS & ADVANCED TECHNOLOGIES

"The Kuiper Belt," by David Jewitt, University of Hawaii. Noon, Bldg. 319, Room 205. Michael Gregg, 3-8946, or Sandra Maldonado, 3-0621.

Monday
4

H DIVISION

"Phase Transformation and Isotopic Quantum Effects in Amorphous Ice," by Jacob Urquidi, Argonne National

Laboratory. 10:30 a.m., Bldg. 219, room 163 (uncleared area). Contacts: Giulia Galli Gygi, 3-4223, or Darlene Klein, 4-4844.

Thursday
7

H-DIVISION

"Solid-Solid Transformation Kinetics in CdSe Nanocrystal Systems," by Keren Jacobs, UC Berkeley. 10:30 a.m., Bldg. 211,

room 227 (cleard area). Contacts: Choong-Shik Yoo, 2-5848; Donna Vercelli, 2-0976.

Friday
8

PHYSICS & ADVANCED TECHNOLOGIES

"Interstellar Dust," by Alexander Tielens, Kapteyn Institute, University of Groningen and UC

Berkeley. Noon, Bldg. 319, Room 205. Michael Gregg, 3-8946, or Sandra Maldonado, 3-0621.

Thursday & Friday
14-15

ENGINEERING AND THE CENTER FOR ADVANCED SIGNAL AND IMAGING SCIENCES

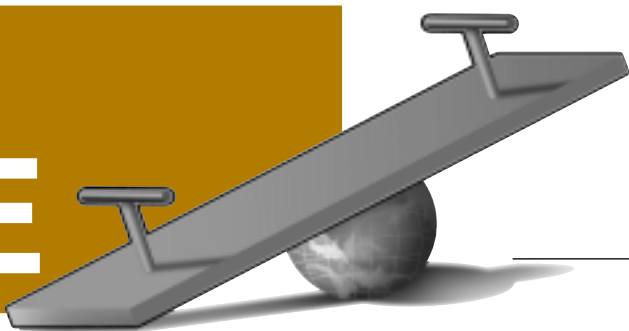
"Signal and Imaging

Sciences Workshop." Thursday, Nov. 14, "Time-Frequency Description of Signals" by Leon Cohen, City University. Friday, Nov. 15, "Expedition Adventure: Using Geophysics to Find Dinosaurs, Pirate Ships and Cavemen" by Alan Witten, University of Oklahoma. Sessions will begin at 9 a.m. and will be held in the Bldg. 123 Auditorium both days (badging required). For registration information, contact Liz Kurzeika, 3-3220.

The deadline for the next Technical Meeting Calendar is noon, Wednesday.

Send your input to tmc-submit@lnl.gov. For information on electronic mail or the news-group lnl.meeting, contact the registrar at registrar@lnl.gov.

work & life BALANCE



A monthly supplement provided to employees as part of Survey Action Team Initiatives.



BALANCING
ACTS
BY
KEN GIANNOTTI

LLESA responds to employees needs

As I retire this October, I want to thank all our members (those who work at LLNL, Sandia, and their retirees), the Livermore business community, our dynamite LLESA staff, our Board of Directors, and our great Laboratory for continued interest and support of the Livermore Laboratory Employee Services Association (LLESA).

I am pleased to have been a part of developing an organization that is responsive to the needs of its customers.

LLESA has played a significant role in helping employees get to know each other and assisting the Laboratory to attract and retain the best talent. LLESA's adaptability will play a pivotal role in addressing the Lab's newly defined work/life initiatives.

What began in 1954 primarily as an informal employee recreation association has evolved over the years into a formal multi-service employee organization known as LLESA (pronounced "Lisa"). LLESA has been a leader in all forms of employee services and work/life activities, winning both local and national work/life awards. It is a trailblazer in childcare, a knowledgeable provider of stress-reducing services and an expert employee services adviser to the Laboratory and its employees.

Employee needs have changed since the '50s, '60s and '70s. There are now two working parents in most families. There is increased awareness of the importance of health and fitness.

UPDATE, See WORK LIFE INSERT page 4

CONCERN offers help

When Marnette Yeager's mother was seriously injured in a car accident a few years ago, Yeager immediately flew to Texas to be at her side.

As a member of the Eldercare Support Group at the Lab, she is well informed on what resources are available and where to look for help. But in a different state and with few contacts, she wasn't sure how to proceed.

So she called CONCERN, which provides confidential counseling and referral services for employees and their dependents as part of the Lab's Employee Assistance Program.

"My mom was lucky to be alive. She had to have her whole left side rehabilitated. When I called CONCERN, they told me who to get in touch with for help in Texas," Yeager recalled. "I was really, really impressed. I stayed with my mom for over a month and after I was back at work, I got a call from CONCERN and



they wanted to know how everything was going and if all the referrals worked out. CONCERN is a really, really wonderful organization."

While the Health Services Employee Assistance Program provides onsite counseling services for employees who need help with personal or workplace issues,

CONCERN, See WORK LIFE INSERT page 4

Therapeutic listening for learning problems

The Compensation, Benefits and Work/life Program Department is hosting a talk by speech pathologist Dr. Deborah Swain on "Therapeutic Listening as a Treatment for Speech, Language, and Learning Problems" from noon to 1 p.m. Wednesday, Nov. 6, Bldg. 123 auditorium.

A follow-on panel discussion with Swain and program participants, including a Lab employee and a guest parent, will be held from 1-2 p.m. in the same location.

Swain is the former chief of speech pathology at the UC Davis Medical Center and current director of the Swain Center



Dr. Deborah Swain

will discuss behaviors, symptoms, and characteristics associated with various problems. A checklist for identification

in Santa Rosa, and The Listening Center in Walnut Creek.

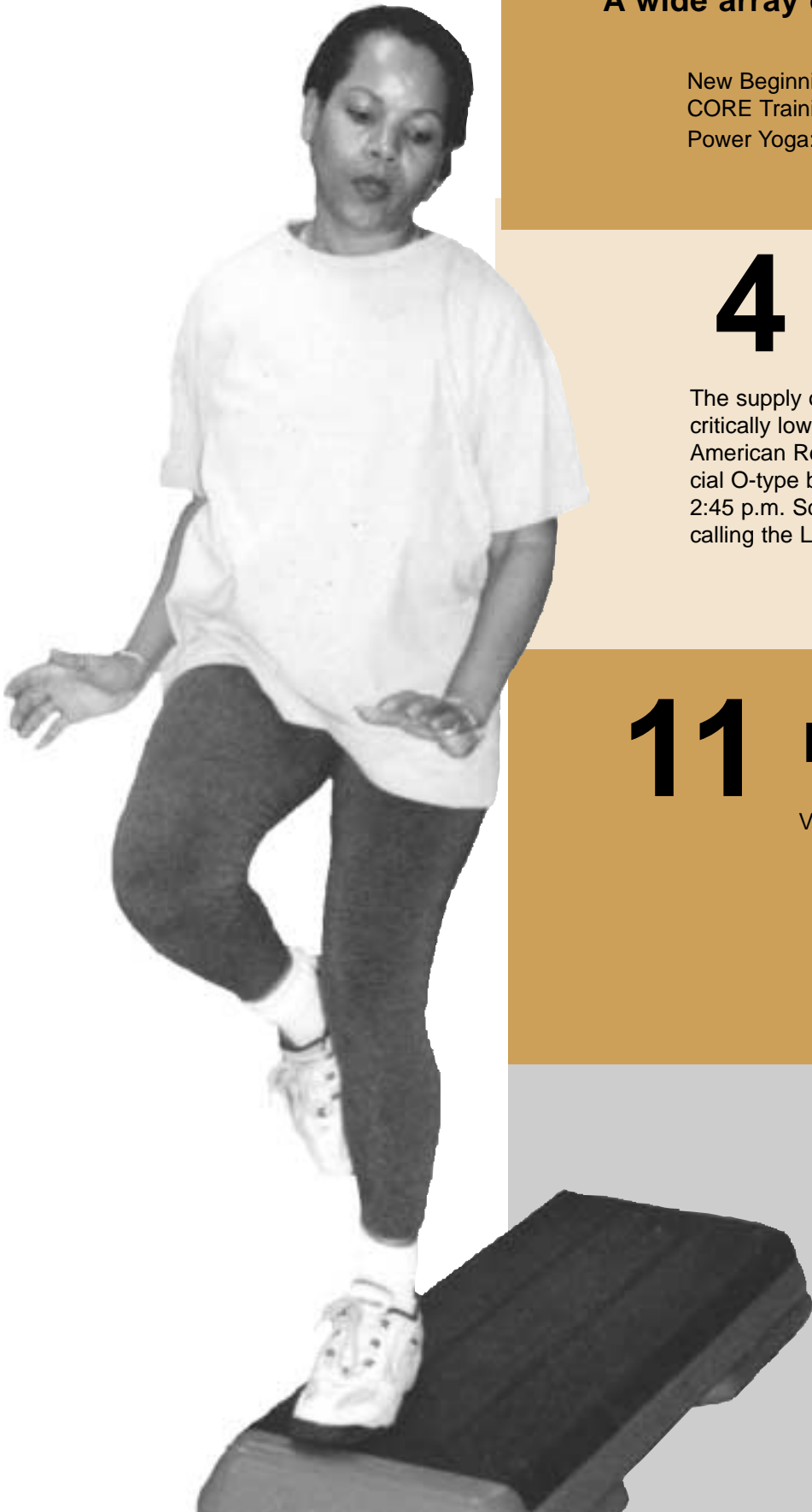
According to Swain, more than 41 million Americans experience communication disorders in varying degrees. Specific symptoms and disorders include auditory processing disorders, attention deficit disorders, developmental delays, and reading and spelling disorders.

During her talk, she

SWAIN, See WORK LIFE INSERT page 4

AFTER HOU

Become balanced to the core. Attend one of the LLESA speciality exercise classes.



28 MONDAY
 29 TUESDAY
 30

A wide array of LLESA speciality classes start this week. Sign-ups for c

New Beginnings: 11:30 a.m.
CORE Training: 11:30 a.m., 5:15 p.m.
Power Yoga: 12:20 p.m.

New Beginnings: 11:30 a.m.
Hip-Hop/Funk Dance Lessons: 12:20 p.m.

Gentle
Swing
Latin D

The Be
for 200

4 MONDAY

The supply of type “O” blood is nearing critically low levels. LLNL and the American Red Cross will have a special O-type blood drive 9 a.m. to 2:45 p.m. Schedule an appointment by calling the LLESA Office at 2-9402.

5 TUESDAY
 Vote today.

Exchange information and help your community through the Community Services Networking Group/Tri-Valley Exchange Group. The next meeting is at noon, Bldg. 323, third floor conference room. Contact: Scott Wilson, 3-3125.

HOME incentive drawing today!

6

Lend
Lister
Probl
Debo
probl
A par
follow

11 MONDAY

Veterans Day

12 TUESDAY

Oh, the trials and tribulations of being a parent. Want help getting through the ups and downs? The Parenting Class meets at noon on the second and fourth Tuesdays in Bldg. 671, room 2000. (Note new location.)

HOME incentive drawing today!

1

19 TUESDAY

This is the year of changing benefits. What does this mean to you? Stop by the Benefits Fair today in the West Cafeteria, from 2 to 5 p.m.

HOME incentive drawing today!

2

T
L
ro
se
2

25 MONDAY

Schedule that chair or table massage before the Thanksgiving shopping-cooking-cleaning crunch hits. Certified massage therapists are on site Monday through Friday, 10 a.m. to 4 p.m. Book your appointment today by calling 4-5321.

26 TUESDAY

HOME incentive drawing today!

JRS AND *Oct. 28–Nov. 2002* in between

0 WEDNESDAY

Classes are on a first-come, first-served basis in Bldg. 415, room 142.

Yoga for Back & Neck Care: 11:30 a.m.
Dance Lessons: 11:30 a.m.
Dance Lessons: 12:20 p.m.

Benefits Office will discuss all open enrollment changes
10/23 at 11:30 a.m. in the Bldg. 123 auditorium.

31 THURSDAY

Gentle Yoga for Back & Neck Care: 12:20 p.m.
Power Yoga: 4:30 p.m.

1 FRIDAY

Open Enrollment Starts

Power Yoga: 11:30 a.m.

5 WEDNESDAY

Give an ear (and an hour of your time) for “Therapeutic
Listening as a Treatment for Speech, Language and Learning
Disorders.” Presented at noon in the Bldg. 123 auditorium, Dr.
Graham Swain will discuss speech, language, and learning
disorders in children and adults as well as treatment options.
Attend a panel discussion with Swain and other program participants
at 1 p.m. in the same location.

7 THURSDAY

LLESA's Merry Old Holiday Faire, with
handmade crafts and holiday fare,
returns to the Barn, 3131 Pacific Ave.,
Livermore, 11 a.m. to 7 p.m.

A representative from Kaiser will make a
presentation and answer questions
about the health plan at noon in the
Bldg. 123 auditorium.

13 WEDNESDAY

“Going Back to School Successfully,” part of the
Lunch Time Learning Series, will take place at noon
in Bldg. 571, room 2301. Registration required. Learn
how to take on the tools you need to head back to
class.

14 THURSDAY

Preparing for earthquakes essentially requires
us to predict what will occur in the future. The
Spotlight on Science community lecture series
presents “Computer Modeling: Predicting
Effects of Major Earthquakes,” by David
McCallen at 7 p.m. at Livermore High School,
600 Maple Street.



20 WEDNESDAY

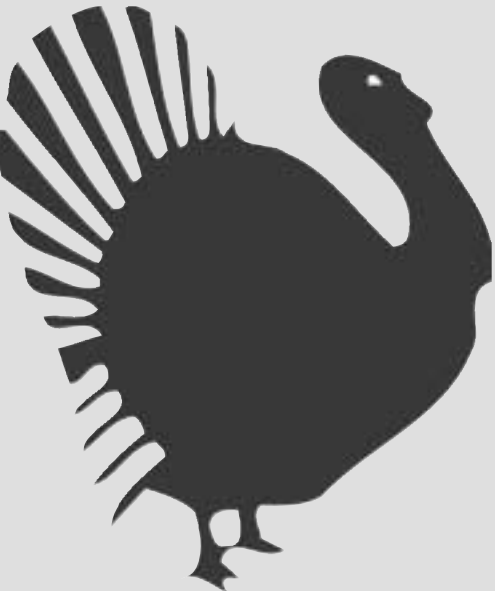
Take a bite out of learning during the Lunch Time
Learning's “Study Skills” session at noon in Bldg. 571,
room 2301. Pre-registration is required to reserve your
seat to this free session. Contact: Sharon Giovannoni,
5571.

21 THURSDAY

The Macintosh Technical Seminar Series con-
tinues at 10:30 a.m. in Bldg. 543 auditorium.

22 FRIDAY

Turn in your HOME
packets every Friday.



28 THURSDAY

Thanksgiving Day

29 FRIDAY

Lab Holiday

GIANNOTTI

Continued from Work Life Insert, page 1

Employees are working longer hours than their parents did, and they now want services that save time and reduce stress. The Laboratory is acting upon work/life suggestions identified in the 2001 Employee Survey. Lab employees considered work schedule flexibility, increased exercise options, time-saving services and childcare to be essential to their work/life success. When I talked with other organizations, they expressed the need for these very services.

The survey said . . .and we're listening

- Time Zone. Employees wanted package sending and receiving services and LLNL asked LLESA to provide those services. UPS services have been available at the Time Zone since early spring and package receiving services are now also available. The Time Zone also features postage stamps, greeting cards, logo attire and items, film development, UC and LLNL business cards, See's candy, and discount tickets to a variety of entertainment attractions.
- Networking Groups. Employees wanted additional space for their activities. The Laboratory converted the former "Employee Store" facility, next to the pool, to an activity building, accommodating

employee exercise and networking group activities — a direct outcome of the Employee Survey. Laboratory employees, retirees and their families pursue their exercise, cultural, educational, community service, and social interests, together, through 40 LLESA sanctioned networking groups, such as bowling, cycling, gardening, archery, quilting and golf.

- Exercise Options. Employees are interested in indoor cardio and weight-strengthening exercise options and in outdoor sports courts, i.e., basketball and volleyball courts. The Lab is reviewing exercise options that would enhance current on-site options, including Fit For Business (aerobics and weight-strengthening classes), specialty classes (dance, yoga and stretching), lap swimming, and informal outdoor volleyball courts.
- Childcare. Childcare continues to be an employee need and concern. A Lab childcare committee is reviewing expanded childcare options. The Laboratory's Children's Center provides full-day childcare services for children 6 weeks to 5 years of age and offers before- and after-school care for elementary schoolchildren. The Center is at capacity, particularly in the infant/toddler care age groups, and expansion is not possible at the Almond Elementary School location.

It matters to me

After 35 years in the employee services

and recreation profession, it has been my observation and experience that employee services and recreation help employees restore physical, mental and social capacities and abilities. Employees who participate frequently in recreation activities are notably happier with their lives, including work. Here at the Lab, again and again, employees have told me how participation in on-site and off-site recreation and employee activities have had a dramatic effect on the quality of their lives.

Of science and people

The Laboratory has two exceptional assets — its science and its people. People turn a good company into a great one when they feel respected and valued. The Laboratory and LLESA are dedicated to helping LLNL's diverse and world-class workforce meet its work/life needs by providing activities that bring all employees together and services that reduce stress and save employees time. LLESA will continue to be a company that uses its strengths in the delivery of its services to UC/LLNL and to the DOE/NNSA. To my mind, there is no better place to work than at the Laboratory. Ken Giannotti has been the LLESA General Manager since 1986, after 18 years of recreation and parks management with the cities of Oakland and Palm Springs. He is retiring Oct. 31.

SWAIN

Continued from Work Life Insert, page 1

of problem areas will be offered to all attendees. All LLNL employees and LLNL contractor and NNSA/OAK personnel are

invited to attend the presentation. Lab employees and Johnson Control employees can bring their family members, 18 years and older, as a guest; however, entrance into Bldg. 123 auditorium requires a badge. Please arrange for family badges through your LLNL offices. Family members must

be U.S. citizens and must have a valid driver's license or DMV ID card (non-drivers) to receive their badges. You will have to pick up your family member at the West Badge office and escort them into Bldg. 123. For questions, call Rosanne Depue at 4-6505.

CONCERN

Continued from Work Life Insert, page 1

CONCERN extends those resources to include a variety of services such as parenting and childcare referrals, eldercare resources and career counseling. "We're here to assist people with coping, whether it's coping with a supervisor, coping with work/life issues or coping with teen-agers," said Kay Gorsuch, one of three psychologists on staff in the Lab's Employee Assistance Program. "CONCERN offers an opportunity for employees who may prefer off-site services." A key benefit of the CONCERN program is that employees and their families can receive services close to where they live, Gorsuch added. CONCERN provides a network of providers across the United States. The Lab has contracted with CONCERN for nearly three years as an additional resource to the on-site EAP. Services include:

- Short-term counseling for personal problems, such as marital and family problems, difficulty with relationships, emotional distress, job stress, conflict issues, alcohol or drug problems or loss and death (up to five visits per year). CONCERN offers 24-hour crisis intervention, short-term counseling and referral to community resources. All services are confidential.
- Parenting and childcare resources. Referrals are available for a variety of childcare services, including family day care homes, infant centers, preschools, adoption assistance, in-home childcare, care for sick children, emergency/drop-in care and college assistance.
- Eldercare resources. Services include referral to programs and resources in your area to help make it easier to handle the task of locating needed help.
- Career management. CONCERN counselors help assess on-the-job career development issues, clarify skills, interests values and work styles.

- Legal consultations. The legal referral service can be used for all types of legal matters — excluding criminal felony cases or claims against the Lab — such as personal/family services, business legal services and IRS matters. When you call, you are linked to a local attorney for a free telephone consultation.
- Financial counseling. Professional financial planners are available by phone to answer most money management, credit and home buying questions. "Employees can call the 24-hour number, identify themselves as LLNL employees and they will be given whatever referrals they're looking for," Gorsuch said. There may be charges to the employee for services that extend beyond the scope of the Laboratory benefit as outlined above. CONCERN services are available 24 hours through 1-800-344-4222 or its Website, www.concern-eap.com. The Employee Assistance Program is located in Bldg. 663 and can be reached at 3-6609.

THE HOME PAGE



The race is on for annual Run for HOME

The annual run and non-profit agency fair kicking off the Laboratory's annual campaign to "Help Others More Effectively," or HOME, will be held on Halloween, Thursday, Oct. 31.

This year's run for HOME is coordinated by the Laboratory Services Directorate and chaired by Ed Cunniffe, Procurement and Materiel Department manager, and the Computation Directorate is managing the monthlong campaign to raise funds for local non-profit agencies and charities. Ted Michels, principal deputy director of Computation, is serving as chair. The goal of this year's campaign is to raise a record \$1.4 million.

The races

Last year, the Run for HOME had more than 800 participants. A goal for this year is to encourage even more to come out and enjoy the day. Employees will have several ways to participate. At the Livermore site, they can walk, skate or run in the 3K race or participate in an 800m swim.

The race will start officially at noon on West Perimeter Drive just outside parking lot Z-3, beside Bldg. 132. Participants can warm up 15 minutes before the race with a brief aerobic workout accompanied by music. The swim begins at 11 a.m. at the Lab pool.

As in previous years, participant-elapsed times will be recorded. For the first time, badge scanners will be used to document participation (Livermore site only). Serious or not-so-serious runners will be able to monitor their running time.

Employees who run, skate or walk in the event will be rewarded with bagels and cream cheese, fruit, energy bars, bottled water, and a "Run for HOME" T-shirt, commemorating both

the run and the LLNL 50th anniversary.

For specific details about the Run for HOME route, see the map below or check the Web: <http://www-r.llnl.gov/home2002/runforhome/homeruncourse.jpg>

Agency Fair

Employees are invited to stroll through the Agency Fair, located in the parking lot south of Bldg. 132, Z-1. Representatives from some 130 charities and non-profits will be on hand in the big tent to display the many options for participating in the HOME campaign and to answer questions.

Prizes for costumes

This year's theme — Superheroes — chosen by Tom Brengle and the AIS committee, intends to encompass the real heroes of Sept. 11, 2001, cartoon superheroes, Lab employees who serve as heroic contributors, and the agencies who work in our communities in superhero fashion.

Employees or groups are invited to use the theme when considering costumes. In past years, the Run for HOME has welcomed creatures like centipedes, star warriors, giant insects, cartoon characters, hula hoopers and a variety of otherwise inanimate objects. This year's theme should provide an additional opportunity for creative costumes.

Donation-award certificates will be presented to the fastest male and female — in the open and masters categories — after the run. There will also be some "fun" awards for the best costumes.

Entertainment

In addition to the festive run, skate, walk, swim and costume competition, Magic Moments will perform music of the 1950s and '60s while

employees stroll through the booths and enjoy their lunches.

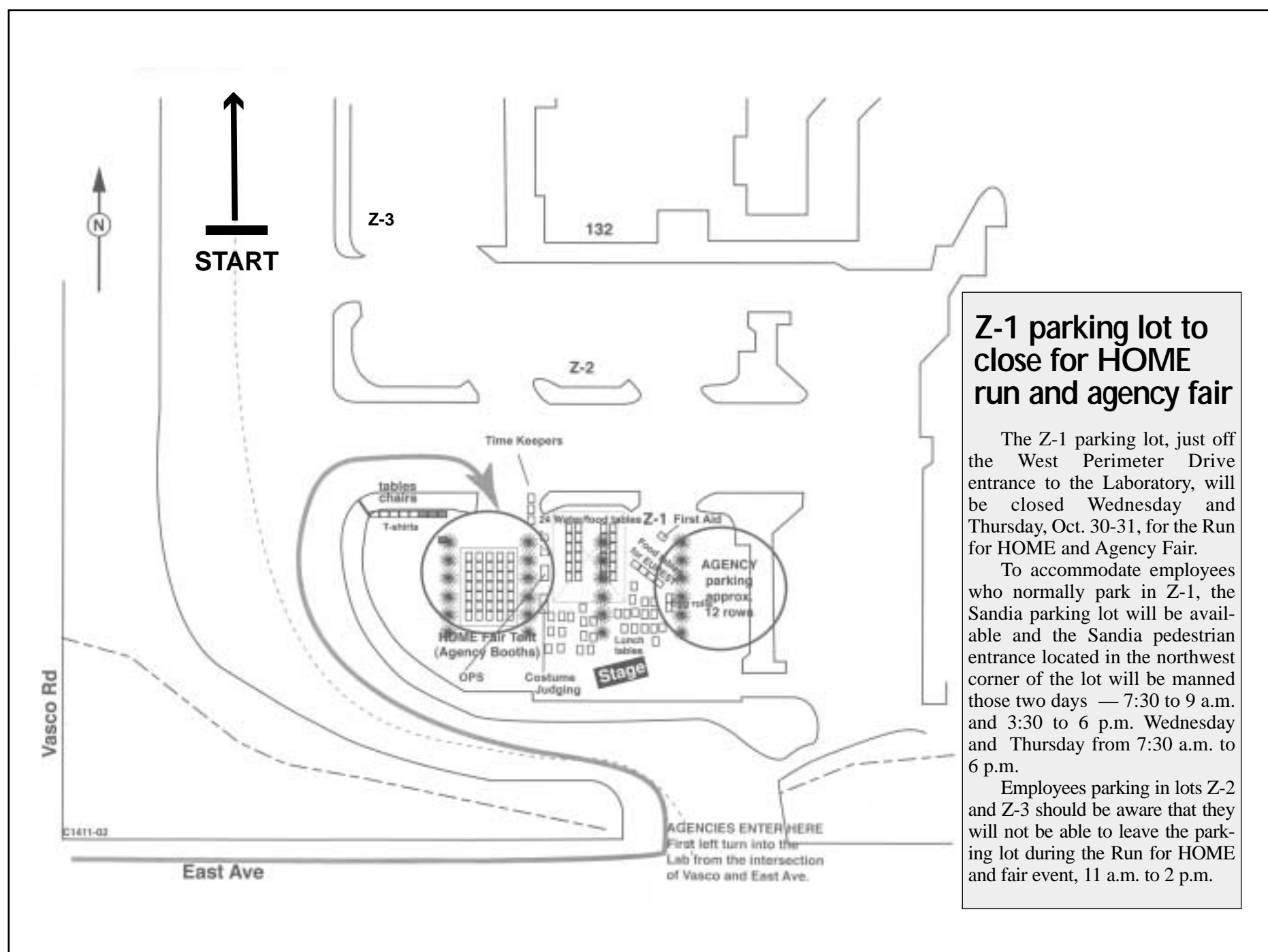
Food

Visitors to the Agency Fair can purchase pre-made salads from Eurest Dining Services or egg rolls from the Chinese-American Network Group in support of its scholarship fund. Egg Rolls are \$1 each (regular or vegetarian). Pre-orders can be made before close of business Wednesday, Oct. 30, through Eric Chow, 2-0552 or chow6@llnl.gov. All pre-business orders may be picked up in the Z-1 parking area outside Bldg. 111 from 11:30 a.m. to 12:30 p.m. All pre-orders remaining after 12:30 p.m. will be sold.

Goals

In addition to raising \$1.4 million for charities and non-profits, this year's campaign aims to increase the number of employees who participate in the campaign.

"The run for HOME and Agency Fair provide an opportunity for us to show our community spirit and to have fun doing it," says Cunniffe. "It's this community spirit that has made the HOME Campaign such a success over the years."





CLASSIFIED ADS

See complete classified ad listings at
<https://www.ais.llnl.gov/newsline/ads/>

AUTOMOBILES

1997 - Toyota Avalon, blue, fully loaded, leather wood interior, 95K mi, best offer. 925-443-3396

1994 - Mitsubishi 3000 GT SL 2D Coup, Red, V6, auto. Fully loaded - including intigrated phone, moon roof, 6-CD changer and more. Excellent condition. 925-837-1060

1993 - Ford Explorer Eddie Bauer, 4WD, loaded, excellent condition, 88K miles, white w/tan, new Michelin tires, family vehicle, \$6750 925-337-1106

2001 - Lexus ES300, Like new, 12K miles, 6 disc CD changer, sun roof. \$28,000. 925-240-5226

1987 - Honda Prelude 2.0 automatic trans power w,d,l cruse am/fm/casset 171K \$2,895 Firm 925-757-8726

2000 - Camaro SS loaded excellent condition low miles. 925-371-0911

1992 - GMC SLE, 3/4 pickup, 100K, excellent shape, may extras, 7500 obo 209-239-1208

2002 - Honda Odyssey EX-Leather. Mesa beige metallic, DVD system, tow package, roof racks, air deflector, 5500 miles. \$30,500 OBO. 925-516-3759

1999 - Nissan Maxima SE, excellent condition, 42,000 mi, loaded, great stereo, \$16,000. 925-846-1453

1997 - Blazer LT, 4 dr, 4X4, PW, PS, PL, ABS, Leather, Moon Roof, AM/FM/Tape/CD, Hitch, Eagle GT II tires, 77K 1-owner miles. 209-814-5278

2001 - Saturn SC2 3-door. White ext./gray int. Excellent condition, 33K mi., all the extras, ppd. maint. \$10,950. 925-485-1988

1989 - BMW 735i leather heated seats, CD, sunroof, automatic, AC, CC, computer 209-612-5051

2000 - Jeep Chrkee Spt. Patriot Blue AT/PW/PL/Tow Pkg/Ski Rack 19K Miles. Still Under Warr. \$15,500 209-832-0205

1992 - Mini Van- Ford Aerostar. 158K miles. Good Family car. Cruise, rack, multidisk CD, new tires. Good condition. \$2750. 925-443-5714

1993 - Honda Accord 2dr, 140Kmi, needs some maintenance work, sun roof, runs well. 3,500 OBO. Call after 5 p.m. 925-371-8015

1996 - SATURN, 2 door, one owner, well maintained, 92K, \$2,200.00. 209-839-1459

1969 - Mustang, 302, A/T, P/S, P/B, \$4,250.00 or best offer 925-634-4974

1969 - We have to part with our classic 1969 VW Beetle. Tan Color. Runs great. New upholstery and seatbelts and rebuilt engine. \$750 925-294-8670

1953 - Studabaker Roadster, convertible, fiberglass body, fireball v8 engine. Will make a great project, needs lots of work. Gotta Go! \$200. 925-449-5626

AUTOMOBILE ACCESSORIES

Trailer hitch for Toyota camry/solara.List is \$160.Sell for \$75.Used once. 209-823-1325

Portable hydraulic engine hoist, load leveler, and engine stand - \$175 for all three. 209-814-5278

Hypertech III Power Programmer Module and leather hood protector for 95-2000 Chevy/GMC Truck or SUV, \$300 obo. Call for details. 209-480-3279

4 Steel wheels off 1998 Chevrolet 4x4. 16 inch 6 lug. \$50 925-516-8339

1997 Chevrolet 8 ft. truck bed w/shell fits 4x4 heavy duty truck. will split up. \$1000 obo 925-516-8339

Black two-bar rolbar for small Toyota or other truck. Good condition. \$150 obo. 925-708-7946

Pickup bed cover, fits 94-2002 Dodge Ram 8 ft. bed. Brand-A.R.E., fiberglass, color-1998 Dodge red metallic. \$550.00. 925-961-1658

Original G.M. SS hood for 70-72 Chevelle / El Camino. Fair condition. \$25.00 925-455-9049

BICYCLES

Car top Bike rack. THULE, model 1060 \$75.00/OBO 209-825-0138

Trek 850, 13 inch. Excellent condition,

\$125. 209-823-5845

NiteRider Digital Pro 12E rechargeable bike light. Powerful dual-beam light with long run time. Incl. box, manual, charger, etc. \$180.00 925-455-6785

BOATS

1993 Kawasaki 650sx stand-up Jetski with trailer \$1200.00 209-825-0453

1968 Sidewinder runabout. Tahiti style hull. Mercruiser 120 I/O. Runs, but needs impeller. \$2500 OBO. 925-516-3759

1985 17ft Searay Seville 2.5L (120hp) Mercruiser Ski/Fishing boat exec. cond. ski s.kneeboard,tube,vests,life jackets,all for 4,200 925-455-8068

1972 Boston Whaler Montauk, 115H.P. Johnson, 1990 Shorelander galv trlr, VHF, Lowrance sonar/gps, extras, good condition, \$7200/OBO 209-931-6836

ELECTRONIC EQUIPMENT

Fisher Modular Audio Component System. Stereo AM/FM, Dual Cassette, Turntable, Speakers. Ask \$50 o.b.o. Works great. 650-348-7544

Take over virtual terminal software for processing secure credit card transactions over Internet. 17 payments at 39.95 each plus transfer fees. 209-836-0249

40GB external firewire hard drive, 7200RPM. New in sealed box with cables. \$110. 925-455-4484

STEREO SYSTEM Onkyo Receiver Amp, CD, Dual Tape; Acoustic Speakers, Secondary Speakers, wiring, manuals, glass-fronted stereo cabinet, \$500. 925-837-6562

Sony Playstation w/8 games, 2 memory cards, 2 controllers. Excellent condition - \$180/bo contact: Cherice 925-245-0626

Computer, Macintosh Performa 6214. Works fine, includes printer and monitor. Great for kids, needs a good home! \$50/offer. 209-836-0949

GIVEAWAY

Queen Sleeper Sofa - sleeper never used, upholstery not perfect but can be repaired or covered. 925-449-1481

Clean fill from our yard. Downtown Livermore. We put in walkways. Dirt and rocks and some surface roots. 925-447-8104

FREE 1956 upright piano, needs tuned. Is HEAVY. You haul. 209-836-9123

Yard and a half of pea gravel from the street in front of my home (ordered too much). First come, first served. 925-454-0943

Approx. 5 gallons interior paint, antique white, flat & satin. Must take all or none. Also 2 alum screens, new, 22 x 36 in. 925-447-5221

HOUSEHOLD

Kitchenaid gas range and convection oven. 2 years new. Glass top is missing, but everything works excellent. Great for cabin or rental. Only \$200. 925-552-0282

Bissel Magic Steamer carpet and floor cleaner. About 12 years old, used less than 20 times. \$25 925-462-6527

Wood lathe from Sears with duplicator, table and tools. Used once. Xclt cond. \$350. 209-836-0249

For sale sofa bed, tweed and matching chair. excellent condition \$250.00 925-447-5208

GE Refrigerator, MOVING SALE, 25.4 Cubic Feet, Double Doors, Ice & Water. LIKE NEW \$600.00 MOVING SALE MUST SELL 925-784-8746

Buffet and two smaller matching end tables with four drawers. Darkish red in color. Heavy. \$250.00 obo. 925-447-8104

Burgundy colored leather 6ft sofa w/ matching Queen Anne wing chair and ottoman. old, but still lots of miles in them. Make offer, you haul. 925-443-8837

GOLDEN OAK QUEEN BEDROOM SET, pier headboard, matching double dresser, mirror. Excellent quality and condition. \$750 925-837-6562

Oak roll top desk. solid oak, paid \$1200 sell for \$700 not a scratch! 925-516-8339

Coffee Table, Oak, Oval w/matching End Table, Excellent quality, Smoked inlaid beveled glass, with lower oak shelf. Excellent Condition!! \$300 obo. 925-426-9459

Queen bedroom set, 8 drawer dresser, detachable mirror, night stand-\$300. Table, claw feet, w/leaf, 4 chairs-\$100. Dynotone rowing machine-\$75. 209-833-2260

Sears Electric Dryer 3 months new - moved and only gas allowed. \$350.00 925-292-4481

Stay Warm This Winter with the Clasic Fisher wood burning insert. Fits normal size fireplace, with protruding stove top. \$200. 925-455-4849

One new set of FAUX brand 2 inch wood blinds (white). 70 1/2 in wide X 58 in tall. Bought for \$400, selling for \$75 obo. 510-271-7730

Flourescent light fixture & lens, wood trim, four 4-foot bulbs, fairly new, excellent condition. Leftover from kitchen remodel. \$25 925-606-9575

Oak Table and four chairs, Ball and Claw Foot, 42 inches round, no leaves, like new, \$500/OBO 209-931-6836

Stroller. Graco 467MR Series. Navy. 925-292-1624

BBQ, Weber Go Anywhere, charcoal grill. Great for tailgates. Paid \$42 plus tax at BBQ Galore. New, still in box. \$30. 925-648-0671

Oval, beveled glass bathroom mirror. \$25. 925-455-0164

MISCELLANEOUS

Cord of Wood (almost), oak and maple (mostly) \$200 408-945-0250

Quality resorts of America membership \$3,000 plus transfer fees. Can be upgraded for top of line \$295. 209-836-0249

Lawn mower, Craftsman electric start self propelled rear bagger lawn mower, older model but works great. \$75 obo. 925-447-4797

LAZY BOY Recliner Chair, Large, Hunter Green, Moving Sale, in Excellent Condition, \$500.00 MOVING MUST SELL 925-784-8746

Spotting scope Nikon XL with tripod. Rubber armor protection; 16-47X60 mm. \$125 925-447-6728

Las Vegas round-trip air and two nights hotel for TWO. \$150. Reserve 60 days in advance, holidays excluded, departs on Tue. 925-899-8438

Pellet Stove for sale. Works great. \$500 or best offer. Located in Tracy. 209-832-2865

Fisher fireplace insert with some wood, \$250 209-537-0229

Chair, small walnut-stained hardwood, good condition, \$10.00, 925-443-5324

Zoo-Phonics - teaching system used in Pleasanton. Complete parent kit: video, flash cards, games, more. New in box. \$100 OBO 925-462-5202

Sofa and Love Seat, Light blue velour, oak trim, high back. Good Condition. \$200 obo 925-426-9459

Album Collectors - LP albums from the 60-80s - some oldies but goodies, all in original album covers, call if interested 925-292-4481

Mens brown leather jacket, large, zip-out lining, like new, \$90. 925-454-9291

Picasso original etching, Pour Robie. Plate signed in reverse. Cert. of Auth. \$600.00. 707-654-1238

Interior door and jamb for 36-inch opening, double door style (two 18-inch doors), solid pine, painted white, excellent condition. \$25. 925-606-9575

Crib with mattress. Maple with drawers; converts to toddler bed. \$50. 925-292-1624

GARAGE SALE: Saturday, October 19(8am-2pm) 125 Henry Ct, Tracy. Twin beds, childs desk, bird cages, clothes, girls bike, other household items. 209-839-8120

MOTORCYCLES

1995 - HONDA XR650L Protapers, Low Miles, All Stock Great Condition \$2,500 OBO 925-516-3680

2000 - Yamaha WR 426 CLEAN!! New tires, New front and rear suspension, FMF pipes , carbon fiber parts, Custom graphics, MANY EXTRAS. \$4,800. 925-855-8368

1997 - Honda XR-100 & Honda XR-80, 1993 model, will sell separately, both in top condition; \$1,450 for XR-100; \$950 for

XR-80. Aft-6pm 209-832-2056

1985 - Black Honda Shadow-Excellent Condition Only 6000 miles. Helmets and saddlebags included \$2400 obo. 925-964-1755

1998 - YZF600 19,800 miles runs great,has extras must sell asking \$4,500 obo 925-961-0919

Shoei helmet, task-five, size L, red, white, and blue, Smoke lens, Like new. Asking 100.00 510-581-1863

1985 - 1985 Honda 350R XL runs good,never been wrecked,street legal,just tuned up,must sell \$1,500obo 925-437-1602

1992 - Suzuki GSXR-1100 complete running and rideable with current tags. Needs carbs rebuilt, kit included. \$1500. 925-449-5626

MUSIC INSTRUMENTS

Old upright piano. 1883. Restorable. \$250.00 925-447-8104

Yamaha Clarinet used one year, stored for several. Great condition. \$100 925-449-6048

PETS & SUPPLIES

Warmblood fillies. German Oldenburg Verband (2 yo) and Westfalen (1 yo). Inspection winners. Dressage, jumping or breeding. \$12K & \$10K 925-679-0783

Free to good home(s): Two neutered male black Labs. 1 yr and 2.5 yrs. Very friendly and good with kids. 925-679-0783

Two female tabby kittens free to good home. 7-8 weeks old. Adorable. One long-haired, one short-haired. 925-447-8138

Horse Riding Lessons, Training, and Boarding. Location: Danville/San Ramon, short distance from Crow Canyon Road! Great Rates! Call for Details! 925-381-2359

Pet Sitting: Responsible, animal-loving lab employee available for pet sitting. Livermore area only please- excellent rates. 925-456-5345

Pet pocket carrier for small dog, jean material. Straps on to your back. Used twice. Excellent condition, paid \$60. \$25. 925-648-0671

Aquarium-35 gallon, with oak cabinet. Excellent condition. Includes all accessories. \$45/offer. 209-836-0949

RECREATION EQUIPMENT

Nordic Trak Cross Country Ski Exercise Machine. Good Condition. New \$600. asking \$20. Dublin. You haul. 925-803-9928

Stair Stepper w/electronic counters \$20.00 925-449-1481

POOL, large round above ground 2yrs old complete w/ toys, chemicals, covers, etc. Great condition. \$250. OBO 925-449-5626

RIDESHARING

Express your commute, call 2-RIDE for more information or visit <http://www-r.llnl.gov/tsmp>.

PATTERSON - Vanpool has seats available. Work hours 7:30-4:00. Take advantage of Pretax Transportation Program & Guaranteed Ride Home Program. 209-892-2118, ext. 2-9502

Modesto - Vanpool needs riders. Meets at Carpenter and Kansas. Departs 6:40 am and leaves Lab at 4:45. Cost \$115/mo. 209-576-0217, ext. 2-7459

Walnut Creek/PlsHill/Concord - Save 200\$/month! New vanpool has openings. Enjoy cosy ride and tax advantage too! Lab hours: 8:00 to 4:45. Also 935-1867, x2-9812. 925-930-0415, ext. 2-6593

SERVICES

San Antonio Valley, Mines Road, pig and quail hunting, 360 private acres. \$45 per person per day. 408-897-3169

Modeled wildlife photography near Yosemite, May 2003. Call for details. 925-625-3350

Hollywood Glamour Portraiture and Headshot Photography for actors entertainers musicians. Livermore studio or location. 925-449-0107

Are you looking for a Professional Massage Therapist? Shiatsu, Swedish, Energy, Jin Shin Jitsu, Pregnancy, Stressed Muscles, Sports, and Deep Tissue. 510-791-8623

CARPET - LINOLEUM - LAMINATES Licensed/bonded/insured, since 1975. Reasonable rates. Get your home ready for the holidays! 925-516-9510

SHARED HOUSING

Livermore - room for rent, 5 miles from Lab, unfurnished, private bath, cable, phone, washer/dryer. \$975/month plus 1/2 utils. 925-243-0950

Livermore - - share 3BR/2BA home in quite neighborhood, private bath, full privileges, N/S, N/P; \$525 + utilities + dep. 925-455-5362

San Ramon - Furn/unfurn room for rent in 2bd Apt. N/S,N/P,N/D. Kitchen/Laundry Privileges. \$600+Deposit,1/2 Utilities. 925-381-2359

Bethel Island - Waterfront Home, furnished room for rent. Private bathroom, full privileges, non-smoker, no pets. \$550/month + deposit 925-684-2646

TRUCKS & TRAILERS

1984 PlaMor 30 ft fifth wheel with hitch. Good cond. \$5000. 209-836-0249

1996 - Chevy Blazer, Excellent condition, Fully loaded, 131,000 miles, 4-Doors \$8,000.00 O.B.O. 209-918-1727

1988 - 21ft Dolphin, class C, motor home. Toyota frame. Very good condition. 31,000 miles. Awning, Hot water heater, Solar Battery charger, Spare Tire. 925-443-8449

2001 - Tow dolly G.V.W.R 35000 Lbs.self-steering wheels and stabilizer.Universal tie down straps and ratchet tie downs, spare tire and holder\$1,200 209-892-1325

6902 - Clean Singal Axel Flat Bed Trailer, lockable ramp / Storage compartment. Electric brakes, Good Tires, Custom Wheels. 2500 LBS Axel . \$850, OBO 925-698-5473

1974 - International Scout II 4x4, winch, locker, auto, air, 345 not running. Excellent Project \$500.00 Needs to go. 925-449-5626

VACATION RENTALS

Phoenix, AZ - Furnished 2 bdrm luxury home in gated community w/golf course and lake view. 55+ adults only. \$1,800/mo - lease available. 925-516-4973

SOUTH LAKE TAHOE - 3 Bedroom 2 bath Chalet, Newly remodeled. nicely furnished, close to all skiing, RESERVE NOW FOR HOLIDAYS/SKIING!! 209-599-4644

Maui, HI - Kahana Reef oceanfront 1BR/1BA condominium. Beautiful two-island view, oceanside pool, and BBQs. Low LLNL rates for year-round reservations. 925-449-0761

Del Mar - Oceanfront condo, Del Mar/Solana Beach, Delux 2 br.2ba., Tennis, pool, jazzuzzi, gated parking, San Diego attractions, Fully equipped, beautifully. 925-443-2271

Wanted, coastal or waterfront rental for Thanksgiving weekend 925-443-5549

WANTED

WANTED: General Mills Box Tops for Education. Collecting for school library. Send to L. Positeri at L728. Collecting year round. 209-576-7560

Large moving boxes in good condition. 209-234-2314

Wanted: Apple computer for child with learning disability to learn keyboarding. 925-321-2004

3 Wheel Bicycle. My Mother can no longer drive a car. She insists on a 3 wheel Bicycle. Can you help? Thanks. Pat 925-447-4941

Set up three Therapeutic Massage Sessions on the same day in your home and your massage is free. Call for details. 510-791-8623

Queen or double bed with mattress and springs. 925-455-0164

COLLABORATION

Continued from page 1

sues in living organisms.

Scientists at the new center, located at the UC Davis campus, will use biophotonics in applications ranging from using light to image or selectively treat tumors, to sequence DNA, to conduct biochemical studies and to identify single biomolecules within cells.

"If I want to see a single molecule or understand how it functions inside a cell, I don't have the technology to do that right now," said Dennis Matthews, director of the new center and a Lab expert in lasers and optics.

"I can only look at cellular functions in past time. That's because scientists have to take a cell out of an organism, freeze, stain and slice it before it can be viewed under a microscope. That doesn't give a clear enough picture of what's going on inside the cell and how it is interacting with other cells around it. Through the power of biophotonics and some of the new technologies that we're developing, we will be able to see the cell while it's living, talking and interacting with other cells around it."

The center brings together roughly 100 researchers including physical scientists, life scientists, physicians and engineers. In addition to UC Davis and the Lab, center members include UC Berkeley, UC San Francisco, Lawrence Berkeley National Laboratory, Stanford University, Alabama A&M University, University of Texas at San Antonio, Hampton University, Fisk University and Louisiana State University.

"The biophotonics field is innovative and its applications are far-reaching," said Bill Goldstein, associate director of the Physics and Advanced Technologies Directorate.

"The Laboratory is pleased to be a partner in this endeavor. The center strengthens ties to UC Davis that have always been a major asset to the laboratory."

Physicians and scientists at UC Davis and LLNL are already testing new microscopes that can more clearly distinguish cancerous and healthy tissue. Plans are under way to develop a hand-held pathogen detection unit to immediately identify the presence of potentially infectious agents, from anthrax to smallpox.

The device, called the Microbead Amino



In vivo bioluminescence imaging at the Center for Biophotonics, Science and Technology.

Assay Dipstick (MIDS), uses antibodies and light to detect biological agents in air, water or soil samples. Scientists hope to turn the prototype into a handheld device for first responders such as paramedics, firefighters and police.

"Lasers have become an essential element in clinical practice in contemporary medicine and surgery," said James E. Boggan, professor of neurological surgery at UC Davis School of Medicine and Medical Center and co-director of the new center.

"Lasers are indispensable in a number of surgical specialties, from dermatology to oncology, and the development of new medical laser technologies and techniques offers tremendous opportunities to improve the practice of medicine further, from developing better sutures to treating osteoporosis."

The Center for Biophotonics Science and Technology is the only NSF-funded center in the country that will focus on this area of research. Funding includes \$40 million from

the NSF over 10 years plus \$12 million in matching funds from federal and state grants and private funding.

"To be selected as the lead campus for such a major multidisciplinary center is a tribute to the strength and depth of UC Davis' research, especially in areas such as biophotonics that cross boundaries between disciplines," said Virginia Hinshaw, provost and executive vice chancellor at UC Davis.

"This exciting opportunity will strengthen our connection to collaborators both regionally and nationally, especially our long-standing links with the Lawrence Livermore National Laboratory."

One of the goals of the center is to develop new technology that will enable scientists and physicians to see what takes place in living cells and how the different components function in real time.

The center's major focus will be to collaborate with industry to accelerate biophotonics technology development and deliver this new technology into the hands of health-care providers," Matthews said. "UC Davis will be the West Coast hub for biophotonics research that business partners can use to make new, leading edge medical devices.

"NSF Science and Technology Centers are very prestigious, but most importantly, they spur research, technology development, education and industry around them. UC Davis and the Sacramento area are destined to become an important BioZone, a biotech industry and research Mecca."

In addition to research and development, NSF also expects the centers to find innovative ways of training young scientists, improving diversity in the scientific workforce and fostering public understanding of science. A major thrust of the UC Davis center is to spark an interest in science in children and young adults so that they can become tomorrow's science and technology leaders.

To achieve those aims, educational partners in the center include Mills College, Oakland; D&Q University, Davis; Las Positas Community College, Livermore; Los Rios Community College, Sacramento; and local schools including Oakridge High School; Sacramento High School; Carson Middle School; Keith B. Kenny Elementary School; Marion Anderson Elementary School and the Tahoe Marian Healthy Start Family Resource Center. For more information: <http://biophotonics.ucdavis.edu/>

DIRECTOR'S OFFICE

Continued from page 1

of Science and the University of California who joined us.

Among those who attended the entirety of "Science Day," from 8 a.m. to 6 p.m., was Director Michael Anastasio. Glenn Mara, deputy director for Strategic Operations, and myself as the acting deputy director for Science and Technology, likewise enjoyed as much of the day as we could, taking turns to "mind the store" up on the fifth floor. This brings me to my purpose in writing the Director's Column this week.

As the new senior management team in the Director's Office, we believe it is very important to reaffirm our own commitment to continue the Laboratory's tradition of scientific excellence and to expand and improve it.

One of the first tasks the new director and his entire senior management team plan to carry out is an in-depth review of our current science and technology investment strategy, and to update it, particularly in light of the evolving needs of the Stockpile Stewardship Program, the imminent beginning of the NIF science program, and the Laboratory's role in

the future Department of Homeland Security. Additionally, the Lab has always done cutting-edge basic science and will continue to do so in all areas broadly aligned with our major programs.

In his first "all hands" meeting, Mike outlined four areas of special interest for the Laboratory at this time: high energy density science, computation, experimental science, and science and technology for emerging national programs. Within this overarching framework, we now need to develop a detailed blueprint, and for that reason Mike has asked me to conduct a "60-day review," the result of which will be a new science and technology investment strategy for the Laboratory. We have substantial existing resources that shape the Lab's S&T future — \$65 million/year in LDRD alone, with additional resources from science-funding federal agencies such as DOE/OS and NIH — and we commit to carry out this study in a timely way so we can begin to implement new strategic directions in the first quarter of FY03.

For that reason, we've temporarily paused — not necessarily deferred — launching some projects well-advanced in their review phase, for example, new LDRD Strategic Initiatives,

"Grand Challenges," etc., until we've completed this study.

Regarding the process by which this exercise will be carried out, we intend it to be inclusive, reaching out broadly across the entire S&T span of the Lab, and the strategic investment plan will derive from our institutional goals. We kicked off the study last week in a meeting with a core group within the Director's Office, and over the next several weeks we will begin to meet with the associate directors and designated groups of the scientific and technical leadership of the Laboratory. Additionally, I invite all members of the Laboratory to express their opinion on this important exercise to me directly either in person or by e-mail (graboske1@llnl.gov).

I'm confident that our coming 50 years will likewise be marked by great science — continued outstanding service in the national interest, profound discoveries about our universe and many distinctions and honors for the great people who will have carried it out. And we will make the Lab an even more exciting place for the next generation of young scientists and engineers to make their career.

Hal Graboske is the acting deputy director for Science and Technology.

HOMELAND

Continued from page 1

representatives from Sandia, Los Alamos, Oak Ridge and Pacific Northwest national laboratories; the National Nuclear Security Administration; the Department of Justice; the Food and Drug Administration; and the Department of Health and Human Services.

Other sections of the transition office are devoted to borders and transportation; information analysis and infrastructure protection; and emergency preparedness and response.

"The big challenge we have is establishing the long-term role and strategy for science and technology to counter threats from weapons of mass destruction," Carter explained. "This is not science for science's sake; it's science with an operational mission."

"Our mission is to bring together the nation's best science and technology, independent of its source."

At the Lab, Carter has served as an associate leader in Q Division for proliferation detection research and development. In Washington, he is



Mike Carter and Greg Suski are providing technical assistance to the Homeland Security Department's transition planning office.

focusing on countering nuclear terrorism.

The work to fight nuclear terrorism, he said, is directed toward four areas: detection and prevention; nuclear crisis response; clean-up and recovery; and consequence management and attribution.

At Livermore, Suski serves as leader of the Electronics Engineering Technologies Division, a position he has held for the past five years. In Washington, Suski is assisting with the prepara-

tion of R&D roadmaps for intelligence information systems and for cybersecurity.

Besides roadmaps for countering nuclear terrorism, intelligence information systems and cybersecurity, other R&D plans are being created for chemical agents, biological agents and critical infrastructure protection.

"We are creating a plan to give analysts the best possible capabilities to anticipate and detect terrorist activities," Suski noted.

"My experience here has driven home to me the importance of the national labs as scientific and technical assets to the nation. The leaders here value the technical depth and vision that the labs offer to assist them in their decision-making," Suski said.

During their time in Washington, Carter and Suski have met with John Marburger, President Bush's science adviser; and officials from the Office of the Vice-President as well as other agencies. Suski praised the support as "extraordinary" that he and Carter have received from fellow Lab workers while they've been in Washington.

"The enthusiastic support of people back at the Laboratory who are thinking about this mission and proposing compelling ideas has been invaluable," Suski said. "We couldn't do what we're doing without their support."

ASCI

Continued from page 1

of solids at the center of an explosion, and the ASCI White IBM computer to model the phenomena occurring during detonation at the micron, or 40 micro-inch, level.

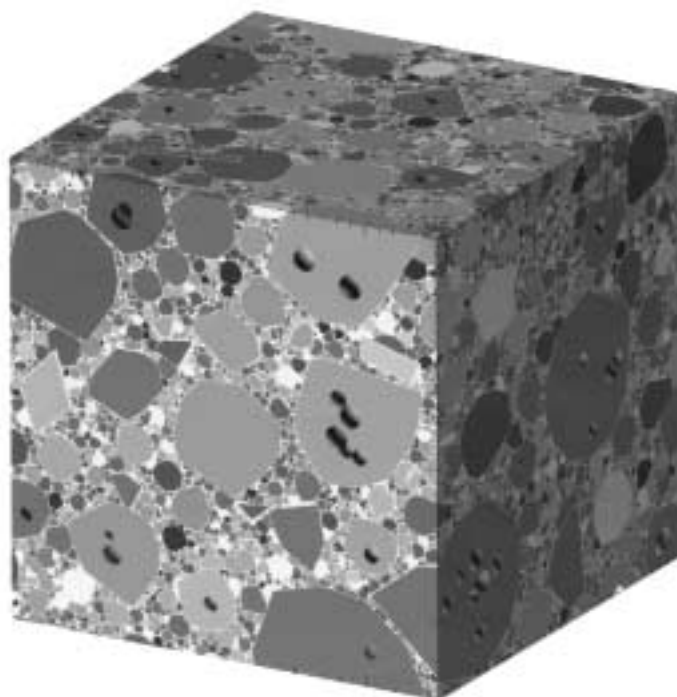
Experimental detonation data do not exist at this minute scale. The ASCI grain-scale simulations currently are the only means to gain physical insight into reaction mechanisms. High-performance plastic-bonded explosives are assemblies of small crystallites of an explosive molecule bonded together with a plastic matrix. More than 100 billion of these crystallites, called grains, are packed into every cubic inch of explosive.

The grain-scale simulations include a description of the shape and position of each of these grains, and the size and location of each of the crystallite defects in a small volume of material, and then calculate the response of this assembly to a shock wave. Results of the grain-scale simulations are used further to develop new models that are able to simulate full-scale explosive systems.

High explosives reactions to external stimuli range from mild pressure bursts to full detonation. It is critical to be able to predict these responses to understand the performance, as well as the safety and reliability, of explosive systems. At present, only simple phenomenological computational models exist for the behavior of high explosives under these conditions.

These models are limited by the assumption that the explosive can be treated as homogeneous. In reality, the explosive is a highly heterogeneous composite of irregular crystallites, intragranular defects, plastic binder and material voids. The heterogeneous nature of explosives is responsible for many of their unique mechanical and chemical properties.

One project goal was to bridge the still-smaller-scale atomic and molecular modeling that for many years has been part of the Lab's explosive research, with the continuum models



The cube above is only 0.3 mm on a side, but contains 100,000 million grains of HMX high explosives. ASCI computer modeling showed that the holes, known as divots, in the larger crystals represent intra-granular defects, which although only 2 percent by volume, create the "hot-spots" that initiate ignition within the high explosive.

that can describe the behavior of full-scale explosive systems. Ideally, information would flow from the research at the molecule- and grain-scale to develop and improve continuum models for larger macro-scale applications.

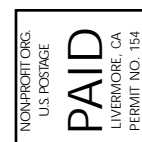
Computational models simulate the response of explosives to external mechanical stimuli at the grain-scale level. The ultimate goal is to understand the detailed processes involved with the material response, so realistic computer material models can be developed and used in a hydrodynamics/multi-physics code to model real systems. The new material models will provide a more realistic description of the explosive system during the most critical period of ignition and initiation.

The focus of this work is to use the results of grain-scale simulations to develop an advanced macroscopic reactive flow model. Such a model would be consistent with understanding of the grain-scale details, and could incorporate such information quantitatively. The objective is to connect changes to observed properties of the explosive (grain size distribution, binder thickness distribution, void shape, size, and separation distribution,

binder mechanical properties, etc.) with predictions of the resulting sensitivity and performance.

In FY00, the computational work was expanded to guide an experimental effort funded under the Joint DoD-DOE Memorandum of Understanding in Advanced Conventional Munitions.

A Level 2 Milestone for the materials effort in ASCI was due in the 4th quarter of FY02, under project team leader Jack Reaugh. A committee external to Livermore will review the milestone this winter to determine formally if requirements were met. Team members included Gary Friedman, Stew Keeton, Riad Manaa, Estella McGuire, Al Nichols, Tom Reitter and Joe Zaugg.



NEWSLINE
UC-LLNL
PO Box 808, L-797
LIVERMORE, CA 94551-0808

This address label is not for personal use. It is to be used by LLNL's Mail Services Department only.